



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Appellant: Jeffrey J. Spiegelman  
Application No.: 09/661,617 Group: 1743  
Filed: September 14, 2000 Examiner: Brian J. Sines  
Confirmation No.: 9556  
For: METHOD OF IDENTIFYING FLUID PURIFICATION  
EQUIPMENT WHICH IS OPTIMIZED FOR INDIVIDUAL  
FLUID PURIFICATION SYSTEMS

CERTIFICATE OF MAILING OR TRANSMISSION	
I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as First Class Mail in an envelope addressed to Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, or is being facsimile transmitted to the United States Patent and Trademark Office on:	
<u>Nov. 17, 2006</u>	<u>Elaine Leahy</u>
Date	Signature
<u>Elaine Leahy</u>	
Typed or printed name of person signing certificate	

REPLY BRIEF UNDER 37 C.F.R. § 41.41

Mail Stop Appeal Brief-Patents  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

This Reply Brief is submitted in reply to the Examiner's Answer mailed from the United States Patent and Trademark Office on September 18, 2006. This Reply Brief is not a substitute brief, but is meant to supplement the Applicant's Appeal Brief by directly responding to the Examiner's arguments in the Examiner's Answer.

Appellant requests that the appeal be maintained.

I. STATUS OF CLAIMS

Claims 1 and 3-29 have been finally rejected and are on appeal. Claims 1, 28 and 29 were amended in the Amendment filed on October 28, 2005. Claim 3 appears as last amended. Claims 4-27 appear as originally filed. Claim 2 is cancelled.

Claims 1 and 3-29 are being appealed.

An appendix containing a copy of the claims with indications of their current status is attached for the convenience of the Board.

## II. GROUND OF REJECTION TO BE REVIEWED ON APPEAL

As set forth and argued in the Appeal Brief, the issues on review in this appeal are:

Issue 1. Whether the Examiner can maintain a rejection under 35 U.S.C. § 103 having failed to address the claim limitations of “automatically identifies for a user a fluid purification equipment package in its entirety” and “automatically identifying for a user one or more fluid purification equipment packages each in its entirety” of the independent Claims.

Issue 2. Whether the Examiner has properly addressed the base claim limitations of:

“from across the whole series of sequential inquiries, forming the set of defining information from received user responses...”;

“from across the received user responses, obtaining the set of defining information...”; and

“receiving user responses to the series of sequential inquiries and therefrom forming said body of defining information...”

In addition, the following issues are now presented in response to the arguments set forth in the Examiner’s Answer. These issues and following arguments are intended to supplement rather than replace the arguments set forth in the Applicant’s Appeal Brief.

Issue 3. Whether claims 1 and 3-29 are properly rejected for merely reciting a mechanical or automatic means of replacing a manual activity to achieve the same result. In re Venner, 262 F.2d 91, 95, 120 USPQ 192, 194 (CCPA 1958).

Issue 4. Whether claims 1 and 3-29 are properly rejected under 35 U.S.C. § 103 as unpatentable over Chang (U.S. Patent No. 5,873,263) in view of Hanson *et al.* (U.S. Patent No. 5,315,521) and further in view of Beelitz *et al.* (U.S. Patent No. 6,182,275 B1).

### III. ARGUMENTS

Arguments for issues 1 and 2 are found in the Appeal Brief, originally filed on May 26, 2006. Arguments for issues 3 and 4 follow.

In the Examiner's Answer, mailed on September 18, 2006, the Examiner states three grounds for rejection. First, the examiner rejects the claims by arguing that providing an automatic or mechanical means to replace a manual activity, which accomplishes the same result, is within the ambit of one of ordinary skill in the art. Second, the examiner states that the applicant's arguments against a finding of obviousness are faulty because non-obviousness cannot be established by attacking a single reference. Finally, the examiner states that the claims of the present application are unpatentable under 35 U.S.C. § 103(a) as obvious under Chang (U.S. Pat. No. 5,873,263) in view of Hanson *et al* (hereinafter, "Hanson") (U.S. Pat. No. 5,315,521) and Beelitz *et al* (hereinafter, "Beelitz") (U.S. Pat. No. 6,182,275), where Beelitz allegedly relates effectively to the same problem and solution and there supposedly is a reasonable expectation of success such that prima facie obviousness is concluded. The Applicant respectfully disagrees with all three grounds for rejection.

A. The present invention does not merely provide an automatic or mechanical means to replace manual activity.

The Examiner cites In re Venner, 262 F.2d 91, 95, 120 USPQ 192, 194 (CCPA 1958), to state the basis for his first ground for rejection: "provid[ing] an automatic or mechanical means to replace manual activity, which accomplishes the same result, is within the ambit of one of ordinary skill in the art." (Examiner's Answer, p. 6). The present invention relates to a method of providing data to a computer, the data describing the system requirements for a fluid purification system. The computer then takes those requirements and formulates a package of individual parts (filters, pumps, pipes, fittings, etc.) that when applied to the fluid purification system, will meet the requirements and be optimal for the particular fluid purification system. According to the Examiner, Chang and Hanson disclose a fluid purification system and a method of optimizing the

performance of such a system respectively. Therefore, in the Examiner's opinion, the computer of the present invention method is merely automating the process taught by Chang and Hanson of selecting optimal components for such a fluid purification system. The Applicant disagrees with the Examiner's argument.

According to the Examiner, the method of the present invention "replaces a manual methodology of consulting print references, such as operating manuals or equipment catalogs" in choosing the individual components that will comprise a fluid purification system. (Examiner's Answer, p. 6) However, the method described by the Examiner, using manuals and equipment catalogs, is a heuristic method for selecting parts. The performance of each part of a fluid purification system – pumps, filters, pipes, fittings, etc. – is dependent upon the properties of the other parts it is connected to. For example, the pressure and flow output of a pump will change depending on the type of filter attached downstream of the pump and also on the diameter of the pipes to which the pump is attached. The user of the "manual" method will begin by selecting parts that would comprise a fluid purification system and then determining the system performance of that selection of parts. Then, the user can attempt to improve the performance of the system through trial-and-error by replacing parts with alternative selections and recalculating the system performance. It is plain to see how a user of the "manual" method could order a set of parts that is not optimal or as close to optimal as possible because he has run out of time to analyze all possible iterations.

The method of the present invention enables the user to obtain the fluid purification equipment package that is optimal or nearest to optimal for a given fluid purification system by the invention quickly navigating through pertinent combinations of compatible parts and then identifying the package whose performance is most closely matched to the required performance. The method of the present invention analyzes combinations in a time efficient manner that the user is incapable of performing via a manual process. Therefore, the method of the present invention performs steps that an individual is incapable of performing "manually" and the Examiner's rejection under In re Venner is unfounded.

B. Applicant refutes non-obviousness by properly attacking cited references in the manner each is applied by the Examiner.

Applicants first address the Examiner's contention that "one cannot show non-obviousness by attacking references individually where the rejections are based on combinations of references." (Examiner's Answer, p. 12). The Examiner relies on In re Merck & Co., 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986) for this proposition. The correct statement from Merck is that "[n]on-obviousness cannot be established by attacking references individually *where the rejection is based upon the teachings of a combination of references*. Merck, 800 F.2d at 1097, 231 USPQ at 380. In Merck, a total of nine references were at issue in the determination of obviousness. 800 F.2d at 1094, 231 USPQ at 376-77. The applicant attempted to establish non-obviousness by arguing that one of the nine references taught away from the combination of references. 800 F.2d at 1097, 231 USPQ at 379-80. The court, in rejecting the applicant's argument, stated that the "prior art as a whole" taught to combine the prior art to arrive at the invention. See 800 F.2d at 1097-98, 231 USPQ at 380.

Here, the Examiner relies solely upon the Beelitz patent to teach the step of using a computerized system to identify fluid purification equipment which is optimized for use in a subject fluid purification system. According to the Examiner, Chang teaches a fluid purification system (Examiner's Answer, p. 3), and Hanson evidences optimization of fluid purification systems by process equipment selection and operation. (Examiner's Answer, pp. 3-4). The Examiner then admits that Chang does not teach "a computer-implemented method for identifying fluid purification equipment, which is optimized for use in a particular fluid purification system." (Examiner's Answer, pp. 4). The Examiner relies solely upon Beelitz to teach a computer-implemented method for "configuring, bundling, and selling a customizable [product]," such as a fluid purification system. (Examiner's Answer, p. 5). No other reference is cited to teach the computer-implemented method/steps.

Arguably, if the Examiner had cited five different references for the computer-implemented steps and the applicant had only attacked Beelitz, then the Merck rule would apply. However, the Examiner relies solely on Beelitz to teach the computer-

implemented method or steps of the independent claims of the present invention. Therefore, the teaching of using a computerized system is not based on “a combination of references” and non-obviousness can be established by individually attacking the Beelitz patent for the computer-implemented method or steps of the independent claims.

Further applying Merck’s “prior art as a whole,” the combination of Beelitz, Chang, and Hanson do not teach the claim elements of “automatically identif[y]ing] for the user a fluid purification equipment package in its entirety that is formed of a resultant set of one or more of the plurality of fluid purification equipment components” and hence do not make obvious the present claimed invention as further discussed below.

C. The present invention as claimed is not obvious from Chang in view of Hanson and Beelitz.

The Examiner has argued that the Claims of the present application are obvious from Chang in view of Hanson and Beelitz. Claims 1, 28, and 29 of the present invention are independent claims. Claims 3-27 all depend upon Claim 1 and will rise or fall with Claim 1. All three independent claims include the limitation of a computer “automatically identif[y]ing] for the user a fluid purification equipment package in its entirety.”

To prove obviousness, the Patent Office must show (a) that the references cited are analogous art, and (b) that “the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art.” In re Clay, 966 F.2d 656, 658, 23 USPQ2d 1058, 1060 (Fed. Cir. 1992). The Applicant first argues that the Beelitz patent is not analogous art against which the present invention should be rejected under 35 U.S.C. § 103(a). Second, the Applicant argues that even if Beelitz is applied as analogous art, when combined with Chang and Hanson, the combination does not teach the Claims of the present application.

1. Beelitz is not analogous art to the claims of the present application.

The Federal Circuit Court of Appeals has cited two criteria for determining whether prior art is analogous: “(1) whether the art is from the same field of endeavor, regardless of the problem addressed, and (2) if the reference is not within the field of endeavor, whether the reference still is reasonably pertinent to the particular problem with which the inventor is involved.” In re Clay, 966 F.2d 656, 658-59, 23 USPQ2d 1058, 1060 (Fed. Cir. 1992). If a reference disclosure relates to the same problem as that addressed by the claimed invention, “that fact supports use of that reference in an obviousness rejection.” 966 F.2d at 659, 23 USPQ2d at 1061. “An inventor may well have been motivated to consider the reference when making his invention.” 966 F.2d at 659, 23 USPQ2d at 1061. A reference is reasonably pertinent if, even though it may be in a different field from that of the inventor’s endeavor, it is one which, because of the matter with which it is deals, logically would have commended itself to an inventor’s attention in considering his problem. 966 F.2d at 659, 23 USPQ2d at 1061. Here, Beelitz and the current application are not from the same field of endeavor; Beelitz is involved with the selection of computer parts by a user to build a complete computer whereas the present invention involves the identification of required system parameters of a fluid purification system by a user that results in the automatic selection by the present invention of fluid purification equipment that is optimized for use in the fluid purification system.

Beelitz and the present invention do not relate to the same problem. Beelitz describes a computer database that only includes data about the compatibility of computer hardware components with one another. For example, a person using the Beelitz method to build a computer would typically start by selecting a central processing unit (CPU). After a CPU has been selected by the user, the user may next be prompted to select a type of random access memory (RAM). The choices of RAM available for selection by the user will be limited to those compatible with the user-selected CPU. After choosing the RAM units, the user may be prompted to select a hard drive for the computer. The choices of hard drives available for selection by the user will be limited to those compatible with both the user-selected CPU and the user-selected RAM. The Beelitz method would continue until the user has selected all of the hardware components that will comprise the computer to be constructed.



The present invention discloses a computer-implemented method of automatically identifying for a user a complete package of parts, which when applied to a fluid purification system, optimizes the system without requiring the user to select the individual components that comprise the package. The present invention uses a computer database, which in addition to compatibility data, includes data on the individual component specifications. In the method of the present invention, the user is prompted to answer questions about the requirements of the fluid purification system. The type of fluid to be purified, the temperature and pressure of the fluid, the flow rate of the fluid, and the purification level of the fluid are examples of the requirements that the user may supply. The computer then analyzes the specifications of the various components that may form a fluid purification equipment package – pumps, filters, pipes, fittings, etc. – and automatically identifies for the user at least one combination of parts (at least one fluid purification equipment package) that will satisfy the requirements input by the user.

The most important distinction between the present invention and the method of Beelitz is that the present invention does not require the user to select the individual components that comprise the fluid purification equipment package (or the fluid purification system in which the package is to operate). Under the method of the present invention, the user does not have to be knowledgeable of the specifications of the individual components and how the components work with one another in a system in order to be capable of ordering an appropriate package. Under the Beelitz method, a user does not have to know whether certain components are compatible with each other because the database method gives the user compatible choices. However, the user does have to know what combination of CPU, RAM, hard drive, etc. will provide him with a computer that will meet his specific performance requirements. By contrast, the user of Applicant's method does not need to have specific knowledge about pumps, pipes, filters, etc. to build a fluid purification equipment package that will meet his system performance requirements. The method of the present invention automatically identifies for the user a complete package of components that will meet the user's performance requirements when applied to the subject fluid purification system. This distinction is further illustrated by the following two examples.

Example 1:

If the Beelitz method were applied to fluid purification systems, a user attempting to order a fluid purification equipment package may first have to choose a filter. To choose a filter, the user would have to know which filters can process his particular fluid, which filters can provide the proper flow rate, and which filters can withstand the fluid temperatures and pressures. Next, after choosing a filter under the Beelitz method, the user may be prompted to choose a pump. The user will only be presented with pumps that are compatible with the filter he has already chosen. However, the user will still be required to understand how each of the available pumps would perform if it were connected to a system with the filter already chosen. Next, after choosing a pump under the Beelitz method, the user may be prompted to choose a type of piping for interfacing with the subject fluid purification system. Again, the user will only be presented with choices of piping that are compatible with the filter and pump he has already chosen. However, the user will still be required to understand how each of the pipe choices will affect the performance of the pump and filter he has already chosen. Finally, after choosing piping under the Beelitz method, the user may be prompted to choose fittings for the filter, pump, and pipes. The user will only be presented with fittings that are compatible with the filter, pump, and pipes he has already chosen. However, the user will still be required to understand how each choice of fittings will affect the performance of the pump, filter, and pipes that he has already chosen. Under the Beelitz method, the user may have to iterate through the series of choices several times to arrive at a package of equipment that meets his needs. For example, after choosing a filter, the available choices of pumps may result in an inadequate fluid flow rate for the user's needs, and the user will have to step back and make a different selection of filter. The example also illustrates how a user of the Beelitz method may end up selecting a system that either does not meet his needs or that exceeds his needs and was more costly than necessary.

The present invention operates completely differently. The user of the method of the present application needs to know nothing of the individual hardware components that comprise a fluid purification equipment package. Rather, the user simply needs to know how he requires the system to perform. Instead of asking the user to first select a filter, the present method may prompt the user to input the fluid that will be purified and

the level of purification that must be achieved. Then, instead of asking the user to select a pump, the present method may prompt the user to input the pressure, temperature, and flow rate of the fluid. Finally, instead of asking the user to select specific pipes and fittings, the present method may prompt the user to input the amount of operating time for the system each day. Based on the user's responses to these inquiries, the present invention method then automatically identifies for the user at least one list of a pump, filter, set of pipes and fittings, that when combined, will meet the user's requirements.

It cannot be emphasized highly enough that the user of the present invention is not required to have any specialized knowledge of the individual components because he is not choosing or otherwise selecting individual components for the subject system.

Example 2:

Suppose that a professional photographer uses Adobe® Photoshop® (a photo-editing software program) and needs a new computer for photo-editing. Further suppose that the photographer intends to use digital photograph files that are each ten megabytes in size and he wants a computer that can perform an editing operation on a file in less than ten seconds. Under the Beelitz method, the photographer, when prompted, would be able to select a CPU with a specific clock speed, select the type and amount of random access memory (RAM), select the graphics card and hard drive, and select all of the other individual components that comprise the computer. The shortcoming of Beelitz is that unless the photographer has detailed knowledge of how CPUs, RAM, hard drives, video cards, etc. work (individually, as well as when placed in a system together), he will not know whether the equipment pieces that he selected will allow him to run Photoshop® to perform an editing operation on a ten megabyte picture file in less than ten seconds. Very likely, the photographer will purchase a computer more powerful (and more expensive) than he needs to ensure that he gets at least the minimum level of performance he desires.

The method in the present invention has an opposite approach. If the present invention were applied to computer technology, the photographer would initiate the method (perhaps by going to a website) and the method would prompt the user for information regarding his use requirements (e.g. a computer for photo-editing). Through

a series of queries, the invention method would determine that the photographer wants to use the latest version of Photoshop® and wants to be able to edit picture files that are ten megabytes in size and wants to accomplish an editing operation in less than ten seconds. Based on this data, the invention method would then provide to the photographer one or more computer packages that satisfy the photographer's requirements. It is emphasized that here, unlike the Beelitz method, the photographer would not be required to have any knowledge of how the actual hardware pieces/components that comprise each computer package perform individually and when placed in a system together.

These two examples illustrate that Beelitz and the present application do not address the same problem and that the Beelitz reference is not analogous art.

2. Beelitz combined with Chang and Hanson does not render the claims of the present invention obvious.

The Examiner makes two arguments that Beelitz in combination with Chang and Hanson make the claims of the present application obvious. Each of these arguments is erroneous as follows.

First, the Examiner cites columns 18 and 19 of the Beelitz patent, claiming that Beelitz teaches a method of automatically identifying individual components. (Examiner's Answer, pp. 6-7). However, this is not what Beelitz teaches. Beelitz, at columns 18 and 19, teaches a hardware "sniffing" program that determines the types of hardware and software in the computer and/or network upon which the user is operating a computer program embodying the Beelitz method. The computer database then further limits the hardware choices available to the user to those that are not only compatible with each other, but also compatible with the hardware and software installed on the user's already-existing computer and/or network. (See Beelitz, col.18, line 45 – col. 19, line 19). Such a sniffing program merely limits the hardware choices the user of the Beelitz method is presented with based on compatibility. The sniffing program does not invite the user to input performance requirements for the computer to be ordered and then provide the user with a complete list of hardware selections that, when combined, will meet those requirements. Therefore, columns 18 and 19 of the Beelitz patent do not

teach the method of the present invention of gathering system requirements and “automatically identif[ying] for the user a fluid purification equipment package in its entirety...”

Second, the Examiner argues that the present invention would be obvious to one skilled in the art in light of Beelitz (see Examiner’s Answer, pp. 12-14). Specifically, the Examiner states that “[t]he initial specification of a processor speed or CPU to be utilized with a computer system is tantamount to specifying a process operating parameter, such as type of gas processed, operating temperature or transfer pump flow rate, for fluid purification in Chang.” (Examiner’s Answer, p. 13). This statement is incorrect. The specification of a processor speed or CPU still requires a user of the Beelitz method to understand how a CPU works well enough to understand which CPU will satisfy his operating requirements. Beelitz relies on a user’s hardware choices, not his requirements, to construct a computer system. Users are left to guess at which hardware choices will meet their requirements. Nothing in Beelitz teaches or suggests a method of querying a user about his system requirements and then presenting the user with an entire package of parts that meet those requirements.

### Conclusion

The Applicant respectfully disagrees with the Examiner that the present invention is obvious and thus unpatentable. First, the present invention does not merely provide an automatic or mechanical means to replace manual activity. The manual process of selecting fluid purification equipment requires selecting and replacing individual components through trial-and-error. The present invention allows for the consideration of many more combinations than would be possible than if the process were conducted by hand, thereby resulting in a system choice closer to optimal.

Second, the Examiner relies solely on the Beelitz patent to teach the use of a computer to limit choices available to the user, thereby allegedly rendering the present invention obvious. However, Beelitz is not analogous to the present invention. Beelitz discloses a method of only allowing a user to select components that are compatible with previously selected components. The present invention, on the other hand, discloses a

method where all individual component choices are made automatically such that the package of components will meet the user's requirements for a fluid purification system. In short, Beelitz is only concerned with compatibility whereas the present invention is concerned with performance.

Finally, even if Beelitz were analogous art, Beelitz, in combination with Chang and Hanson, does not render the present invention obvious. The Examiner argues that Beelitz discloses a "sniffing" program to automatically detect the hardware and software already used by a person buying a new computer, and that this disclosure makes the present invention obvious. However, Beelitz's sniffing program only further constrains the hardware choices available to the user of Beelitz's method; it does not contemplate making hardware choices for the user based on the user's performance requirements.

Further, Beelitz's disclosure of a user selecting a CPU is not the same as specifying a process operating parameter in a fluid purification system. Selecting a CPU is equivalent to selecting one component of the fluid purification equipment. The present invention eliminates the need for the user of the method to select individual components. Instead, the user only provides information about his total system needs and the method automatically identifies for and provides the user with a complete package of equipment that will not only meet the user's needs, but will be optimal in the subject fluid purification system. Beelitz neither contemplates, nor discloses a method whereby the user inputs his performance requirements and is then automatically provided with a complete package of equipment that meets those requirements. Therefore, the present invention is not obvious from Beelitz with Chang and Hanson.

The forgoing patentable distinctions are recited in the independent claims as follows (the full recital of the claims is found in the claims appendix of the appeal brief and a second copy is provided here for the convenience of the Board).

1. A method for identifying fluid purification equipment which is optimized for use in a particular fluid purification system, which comprises computer implemented steps of:  
...

through an interactive interface, receiving user responses to a series of sequential inquiries, said inquiries piecewise eliciting from a user a set of defining information regarding said particular fluid purification system,...

from across the whole series of sequential inquiries, forming the set of defining information from received user responses; and

using said formed set of defining information, searching specifications of said database in a manner that *automatically identifies for the user a fluid purification equipment package in its entirety that is formed of a resultant set of one or more of the plurality of fluid purification equipment components...* to form fluid purification equipment in a manner specific to said particular fluid purification system as set forth by the set of defining information and operated to substantially satisfy the operating parameters therein for optimized fluid purification, the automatic identification of the fluid purification equipment package being performed in a manner free of user selection from and interaction with lists of individual components in the interactive interface.

28. A method for identifying fluid purification equipment which is optimized for use in a particular fluid purification system, the method comprising the computer implemented steps of:...

through an interactive interface receiving user responses to a series of sequential inquiries, said inquiries piecewise eliciting a set of defining information regarding said particular fluid purification system,...

using said obtained set of defining information, accessing the database and *automatically identifying for a user a fluid purification equipment package in its entirety...* the resultant set of one or more identified components capable of being assembled to form fluid purification equipment in a manner specific to said particular fluid purification system according to the set of defining information and operating to substantially satisfy the operating parameters therein for optimized fluid purification, the automatic identification of the fluid purification equipment package being performed in a manner free of user selection from and interaction with lists of individual fluid purification equipment components in the interactive interface...

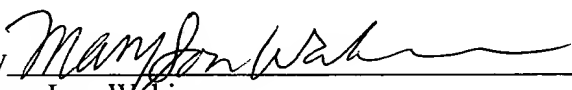
29. A computer-implemented method for identifying fluid purification equipment which is optimized for use in a particular fluid purification system, which comprises:...

through an interactive interface, providing a series of sequential inquiries to a user,...said series piecewise eliciting a body of defining information regarding said particular fluid purification system, the body of defining information including operating parameters of said particular fluid purification system;...

using said formed body of defining information to retrieve specifications from the database and therefrom *automatically identifying for a user one or more fluid purification equipment packages each in its entirety*...the resultant set of one or more identified components capable of being assembled to form fluid purification equipment in a manner specific to said particular fluid purification system as defined by the body of defining information and operated to substantially satisfy the operating parameters therein for optimized fluid purification, the automatic identification of the fluid purification equipment packages being performed in a manner free of user selection from and interaction with lists of individual fluid purification equipment components in the interactive interface.

Respectfully submitted,

HAMILTON, BROOK, SMITH & REYNOLDS, P.C.

By  11/17/06  
Mary Lou Wakimura  
Registration No. 31,804  
Telephone: (978) 341-0036  
Facsimile: (978) 341-0136



CLAIMS APPENDIX

1. (Currently amended) A method for identifying fluid purification equipment which is optimized for use in a particular fluid purification system, which comprises computer implemented steps of:
  - providing a relational database of specifications regarding a plurality of fluid purification equipment components;
  - through an interactive interface, receiving user responses to a series of sequential inquiries, said inquiries piecewise eliciting from a user a set of defining information regarding said particular fluid purification system, each subsequent inquiry in the series being dependent on user responses to previous inquiries in the series, the set of defining information including operating parameters of said particular fluid purification system;
  - from across the whole series of sequential inquiries, forming the set of defining information from received user responses; and
  - using said formed set of defining information, searching specifications of said database in a manner that automatically identifies for the user a fluid purification equipment package in its entirety that is formed of a resultant set of one or more of the plurality of fluid purification equipment components from the specifications in the database, the resultant set of one or more identified components capable of being assembled to form fluid purification equipment in a manner specific to said particular fluid purification system as set forth by the set of defining information and operated to substantially satisfy the operating parameters therein for optimized fluid purification, the automatic identification of the fluid purification equipment package being performed in a manner free of user selection from and interaction with lists of individual components in the interactive interface.
2. (Canceled)
3. (Previously presented) A method as in Claim 1 further comprising at least one of said operating parameters being selected from the group consisting of fluid type, fluid flow rate, inlet fluid contaminant challenge, outlet fluid purity, duty cycle, life span

between service, fluid temperature, fluid pressure, cost and connections to upstream and downstream portions of said particular fluid purification system.

4. (Original) A method as in Claim 1 wherein said database comprises a plurality of subdatabases, each subdatabase comprising selection information regarding at least one property of at least one said component of said fluid purification equipment.

5. (Original) A method as in Claim 4 wherein a series of said responses to inquiries through said interface causes said operating system to compile a series of component selections from said plurality of subdatabases, which components will, when assembled, form said fluid purification equipment which can be operated so as to optimize fluid purification in said particular fluid purification system.

6. (Original) A method as in Claim 5 further comprising causing said subdatabases to be addressed sequentially, a sequence of addressing being determined at each step in said sequence by said response elicited in an immediately prior step.

7. (Original) A method as in Claim 5 wherein compilation of said series of component selections further causes said operating system to generate a subsequent series of inquiries regarding choice of equipment ancillary to said fluid purification system.

8. (Original) A method as in Claim 7 wherein said equipment ancillary to said fluid purification system comprises fluid flow, process control and instrumentation equipment.

9. (Original) A method as in Claim 4 wherein said selection information of at least one of said subdatabases comprises data for evaluating from said responses whether a defined component currently is available in the marketplace and if not what design and manufacture costs of said defined component would be.

10. (Original) A method as in Claim 4 wherein said selection information of at least one of said subdatabases comprises data for evaluating from said responses whether

combinations of defined components are operationally compatible and presenting a notification thereof.

11. (Original) A method as in Claim 10 further comprising said notification including suggesting options for alternative compatible combinations.

12. (Original) A method as in Claim 1 further comprising said using said defining information to identify a plurality of combinations of said components, wherein each combination of said plurality can be assembled to form said fluid purification equipment in a manner specific to said particular fluid purification system and can be operated so as to optimize fluid purification in said particular fluid purification system.

13. (Original) A method as in Claim 12 wherein said combinations of said components differ from each other with respect to technical and economic parameters, and said method further comprises generating a further inquiry response to which indicates selection among said combinations of a specific combination of said technical and economic parameters most suitable for obtaining optimized fluid purification in said particular fluid purification system.

14. (Original) A method as in Claim 1 wherein said fluid comprises a liquid, a gas or a mixture thereof.

15. (Original) A method as in Claim 14 wherein purification of said liquid, gas or mixture comprises removal of contaminants to a level in a parts per million or parts per billion range.

16. (Original) A method as in Claim 14 wherein purification of said liquid, gas or mixture comprises absorption, separation or filtration.

17. (Original) A method as in Claim 1 further comprising gaining access to said relational database by means of a computer or through a global computer network.

18. (Original) Apparatus comprising electronic media comprising embodiment of the method of Claim 1 in a form accessible for interactive use.

19. (Original) Apparatus as in Claim 18 further comprising said embodiment comprising a relational database and operational software therefor.

20. (Original) Apparatus as in Claim 19 wherein said relational database comprises a plurality of subdatabases, each subdatabase comprising selection information regarding at least one property of at least one said component of said fluid purification equipment.

21. (Original) Apparatus as in Claim 20 wherein said selection information of at least one of said subdatabases comprises data for evaluating from said responses whether combinations of defined components are operationally incompatible and presenting a notification thereof.

22. (Original) Apparatus as in Claim 19 further comprising accessibility to said relational database and operational software therefor being by means of a computer.

23. (Original) Apparatus as in Claim 22 where said relational database and operational software therefore are maintained on and accessible from said interactive storage media disposed within said computer.

24. (Original) Apparatus as in Claim 23 wherein said interactive storage media comprises a memory hard drive, a CD-ROM or a DVD-ROM.

25. (Original) Apparatus as in Claim 22 wherein said computer comprises a desktop computer, a laptop computer or an Internet-access-specific computer.

26. (Original) Apparatus as in Claim 18 wherein said electronic media comprises a global computer network.

27. (Original) Apparatus as in Claim 26 further comprising said embodiment comprising a relational database and operational software therefore, with accessibility thereto being through an Internet Web site on said global computer network.

28. (Currently amended) A method for identifying fluid purification equipment which is optimized for use in a particular fluid purification system, the method comprising the computer implemented steps of:

- providing a relational database of specifications regarding a plurality of fluid purification equipment components;

- through an interactive interface receiving user responses to a series of sequential inquiries, said inquiries piecewise eliciting a set of defining information regarding said particular fluid purification system, each subsequent inquiry in the series being dependent on user responses to previous inquiries in the series, the set of defining information including operating parameters of said particular fluid purification system;

- from across the received user responses, obtaining the set of defining information;

- using said obtained set of defining information, accessing the database and automatically identifying for a user a fluid purification equipment package in its entirety, said fluid purification equipment package being formed of a resultant set of one or more of the plurality of fluid purification equipment components from the specifications in the database, the resultant set of one or more identified components capable of being assembled to form fluid purification equipment in a manner specific to said particular fluid purification system according to the set of defining information and operated to substantially satisfy the operating parameters therein for optimized fluid purification, the automatic identification of the fluid purification equipment package being performed in a manner free of user selection from and interaction with lists of individual fluid purification equipment components in the interactive interface; and

- providing an option to purchase said automatically identified fluid purification equipment package.

29. (Currently amended) A computer-implemented method for identifying fluid purification equipment which is optimized for use in a particular fluid purification system, which comprises:

providing a relational database of specifications regarding a plurality of fluid purification equipment components;

through an interactive interface, providing a series of sequential inquiries to a user, each subsequent inquiry in the series being dependent on user responses to previous inquiries in the series, said series piecewise eliciting a body of defining information regarding said particular fluid purification system, the body of defining information including operating parameters of said particular fluid purification system;

receiving user responses to the series of sequential inquiries and therefrom forming said body of defining information; and

using said formed body of defining information to retrieve specifications from the database and therefrom automatically identifying for a user one or more fluid purification equipment packages each in its entirety, each identified fluid purification equipment package being formed of a respective resultant set of one or more of the plurality of fluid purification equipment components from the specifications in the database, the resultant set of one or more identified components capable of being assembled to form fluid purification equipment in a manner specific to said particular fluid purification system as defined by the body of defining information and operated to substantially satisfy the operating parameters therein for optimized fluid purification, the automatic identification of the fluid purification equipment packages being performed in a manner free of user selection from and interaction with lists of individual fluid purification equipment components in the interactive interface.